

DESCRIPTIONS OF NEW GENERA AND SPECIES OF  
HYMENOPTERA COLLECTED BY MAJOR C. S.  
NURSE AT DEESA, SIMLA AND FEROZEPORE.

BY P. CAMERON.

PART I.

[With a Plate.]

(Read before the Bombay Natural History Society, 11th Dec. 1900.)

In this paper I have described some new genera and species of *Hymenoptera* taken by Major C. S. Nurse, I. S. C. Apart from the new genera, the most interesting of Major Nurse's discoveries is the undescribed species of *Meira*—a genus not hitherto recorded from India, and of which only a few species are known from the South of Europe and the North of Africa. Major Nurse has also been able to give us the first record of the rearing of a species of *Mutilla* in India, and, what is of as much importance, he has reared both sexes. *Mutilla* is probably one of the largest genera of *Aculeate Hymenoptera*, and is fast becoming utterly unwieldy from the fact of the males and females having to be treated as distinct species.

FOSSORES.

MUTILLIDÆ.

*MUTILLA CLIMIA*, *sp. nov.*

Nigra, dense albo pilosa, alis fusco violaceis, basi free hyalinis ;  
stigmate pallido, magno. ♂

Length.—7-8 mm.

*Habitat.*—Deesa.

Antennæ black, the flagellum brownish on the lower side, the scape thickly covered with white pubescence. Head black, shining, thickly covered with long white hair, which is longest on the vertex ; the front and vertex are closely and distinctly punctured ; the apex of the clypeus is piceous. Mandibles black, shining, a piceous band near the middle, the palpi black. Thorax black, thickly covered with white hair ; the meso- and pro-notum closely punctured, the latter more coarsely than the former. Scutellum closely rugose, the middle coarsely aciculated. Median segment closely and uniformly reticulated. Pleuræ closely, rugosely punctured. Wings fuscous-violaceous, the base and the anterior wings more hyaline in tint ; the radial cellule is small, the radius roundly curved from the first transverse cubital

nervure; the basal abscissa is straight, oblique; there are only two transverse cubital nervures; the first is straight and oblique, the second is roundly curved outwardly; there is only one recurrent nervure; the third transverse cubital nervure is curved down, and then runs along parallel with the cubitus. Legs black, covered with white hair; the spurs black. Abdomen black, thickly covered with long white hair; the apex of the second, the third entirely and the others more or less covered with white pubescence; the pygidium is not defined; the apex of the segment is depressed, smooth, bare and shining; the apex transverse with the sides broadly rounded; the hypopygium has the apical half smooth, the basal punctured; the ventral keel has a small tooth at the apex. The petiole is narrowed at the base, where it projects on either side into an oblique tooth; it becomes gradually broader to the apex.

This species comes very near to *M. japhia* here described; it may be known from it by the median segment being uniformly reticulated, there being no clear space in the middle at the base; the wings have a more decided violaceous tinge; the second cubital cellule is smaller; the second transverse cubital nervure has a much more distinctly rounded curve, and is more oblique; it is also a smaller species, and the front is not reticulated.

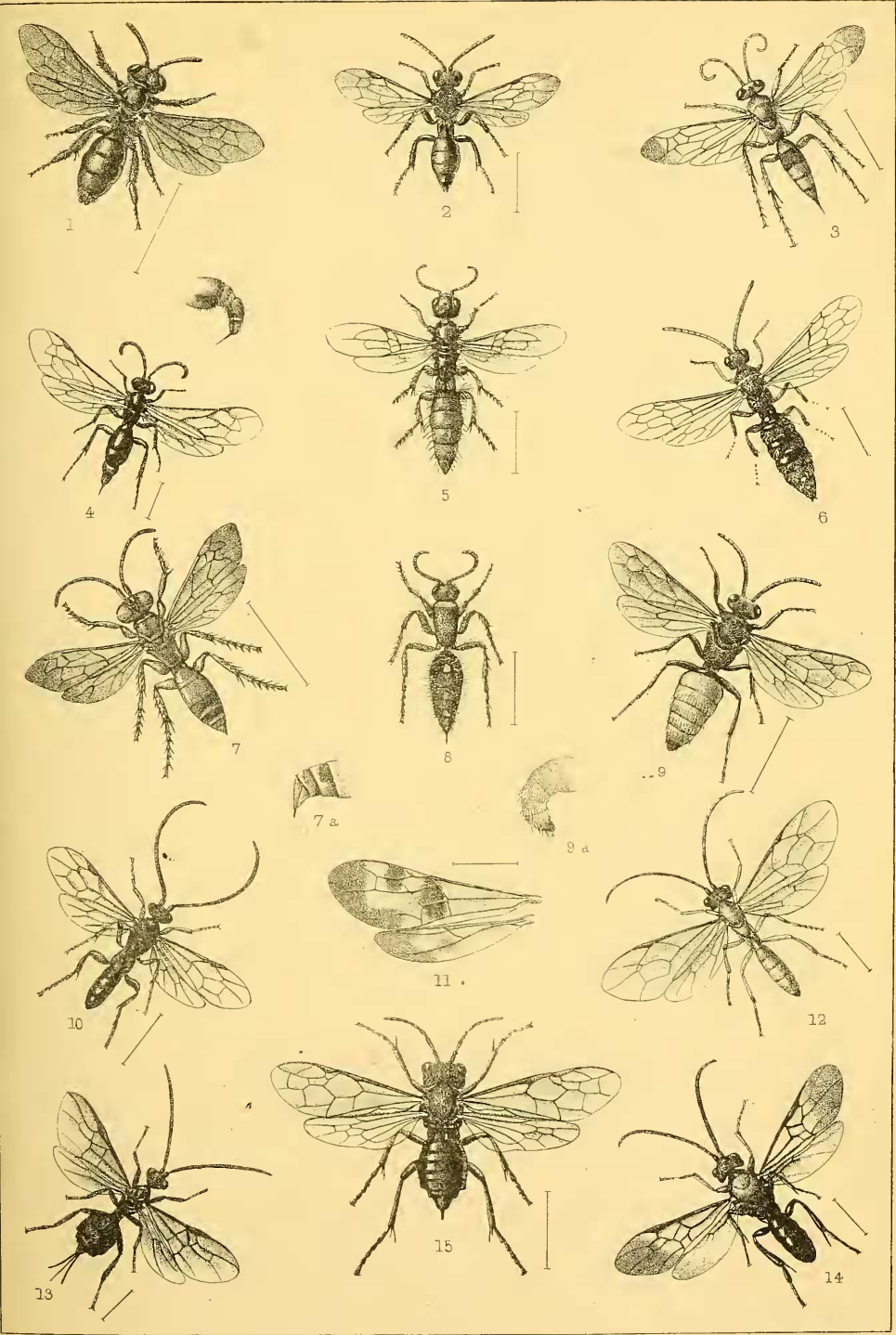
*MUTILLA JAPHIA, sp. nov.*

Nigra, dense albo hirsuta; fronte reticulato, basi metanoto laevo; alis hyalinis, apice fere fumatis. ♂

Length.—8 mm.

*Habitat.*—Deesa.

Antennae stout; the scape thickly covered with white pubescence; the flagellum with a pale down; the third joint is not much longer than the second and about one-half the length of the fourth. The front, including the eye incision, is closely reticulated; the vertex strongly and deeply punctured, except behind the ocelli, where the punctuation is weaker; the front and vertex are covered with long white pubescence; the face is opaque, coarsely alutaceous and covered with long white hair. Pro- and meso-notum coarsely and deeply punctured; the scutellum is more closely, more rugosely punctured. Median segment reticulated, except in the middle above the top of the apical slope, where it is smooth, except for some irregular, broken keels. Pleurae smooth and shining; the raised middle part of the meso-notum coarsely punctured. Legs thickly covered with white hair; the



West, Newman lith.





calcaria pale. Wings hyaline; the apex smoky; the nervures black the third transverse cubital nervure is obliterated; the cubitus obliterated beyond the second transverse cubital nervure. The petiole and second segment are thickly covered with long white hair, as are also the others, which have also their apices fringed with depressed white hair. The post-petiole is strongly punctured and clearly separated; the ventral keel is straight and of uniform elevation.

MUTILLA ACASTA, *sp. nov.*

Nigra, thorace rufo; alis hyalinis, nervis fuscis. ♂

Length.—7 mm.

Habitat.—Simla.

Antennæ deep black; the scape covered with long white hair. Head as wide as the thorax, shining; above the antennæ closely and distinctly punctured and covered with long white hair; the middle of the front is smooth. Eyes oval, not incised on the inner side. Mandibles curved, broad, ending on the lower side in a sharp, somewhat triangular, clearly separated tooth. Thorax entirely ferruginous; the base rounded. Meso-notum strongly and uniformly punctured and covered with long pale hair; there are no furrows on it. Scutellum more closely punctured than the meso-notum. Median segment with a gradually rounded slope, closely reticulated all over; the reticulations at the base only slightly larger than the others. Wings hyaline, only slightly infuscated towards the apex; the stigma is black; the nervures fuscous; the basal abscissa of the radius is straight and oblique, the apical roundly curved; the first transverse cubital nervure is straight and oblique, the second rounded, the third obliterated; the first recurrent nervure is received near the apex of the basal third of the cellule; the second is faint, almost obliterated, and is received shortly beyond the second transverse cubital nervure; the transverse median nervure is received distinctly beyond the transverse basal nervure; the nervures in the hind wings are either faint or obliterated. Legs black, covered with white hair; the calcaria white. Abdomen black, covered, but not thickly, with long white hair; the second ventral segment is closely punctured; the basal three-fourths keeled in the middle; the keel ends in a triangular tooth; there is no distinct keel on the underside of the petiole; the pygidium is closely punctured and not keeled laterally; the epipygium is dilated in the middle; the basal and apical slopes are straight and oblique.

This species does not fit well into any of the sections of *Mutilla* as defined by recent writers, *e.g.*, M. Ernest André. It appears to be intermediate between *Cystomutilla* and *Dasylabris*; it has the stigma fairly well developed and the abdomen subpetiolated as in the former, but there are no furrows on the meso-notum; from *Dasylabris* it may be known by the abdomen not being clearly petiolated. It cannot very well be confounded with any of the known Indian species, being easily known by there being only two transverse cubital nervures, by the curved mandibles with only one apical tooth, by the transverse basal nervure not being interstitial, and by the almost sessile abdomen.

*MUTILLA DIOMEDA, sp. nov.*

Nigra, dense albo pilosa; thorace rufo; alis fusco-violaceis, basi fere hyalinis, nervis nigris, ♂

Length.—10 mm.

*Habitat.*—Simla.

Antennæ black, stout, covered thickly with microscopic pile; the scape with longish white hair. Head distinctly narrower than the thorax; the front and vertex rugosely punctured: the ocellar region smooth, raised and bordered laterally by a smooth space; the front bears in the centre a wide, but not very deep, furrow; the front thickly covered with white pubescence and more sparsely with longish white hair; the vertex more sparsely with long white and black hairs. Antennal tubercles rufous. Clypeus roundly, but not deeply, incised in the middle; aciculated. Mandibles black, their base thickly covered with long white hair. Palpi black, thickly covered with white hair. Thorax rufous, the sternum black; pro-notum smooth, transverse at the base; meso-notum coarsely and deeply punctured, the punctures of almost equal size throughout; the two furrows are deep. Scutellum not quite so strongly punctured as the meso-notum, but quite as closely; its base smooth and with an oblique slope. The median segment has a gradually rounded slope, and is closely reticulated; at the base are two large areas with a smaller, shorter area on the sides; these areas are irregular in shape. Wings fuscous, with a violaceous tinge; at the base they are paler, more hyaline; the basal abscissa of the radius is straight, oblique and thinner than the rest of it; the apical is roundly curved; the extreme apex straighter than the lower portion; the second transverse cubital

nervure is sharply elbowed above the middle ; the third transverse cubital is distinct throughout, but thinner than the others. Legs black, thickly covered with white hair ; the calcaria white. Abdomen black ; the four basal segments banded with long white hair, the others with long black hair ; the petiole and the second segment are closely and strongly punctured ; the ventral keel on the petiole is narrow and straight, not projecting much. The last segment is closely and strongly punctured, except in the middle at the apex ; below it is punctured strongly and closely ; it has no keels, and bears near the base a transverse smooth furrow.

This species is allied to *M. antennata*, Smith, which I only know from the descriptions of Smith and Bingham ; the description given by both authors of the meta-thorax does not fit our species at all ; it is said to be covered with large shallow punctures and having a smooth channel down the centre, which has on each side an elevated keel ; “ the palpi are ferruginous, the antennæ fusco-ferruginous,” &c.

MUTILLA REGIA, Smith. (P. l. fig. 8 ♀. 9-9 a ♂.)

Captain Nurse has reared from adjacent cells in a nest of *Eumenes escuriens* a ♀ *Mutilla regia*, Smith, and a ♂ *Mutilla* which is, doubtless, the other sex. As I cannot make out that this ♂ has been described under any name, I give a description of it. This is the first time the history of any Indian species of *Mutilla* has been recorded. Black ; the abdomen ferruginous, the basal and apical segments black. Head thickly covered with silvery hair ; the antennal tubercles rufous ; the antennal keel sharply projecting. Clypeus covered with long white hair ; its apex smooth, rounded. Mandibles broadly rufous before the apex. Palpi black. Pro- and meso-notum closely and coarsely punctured ; the pronotum with a broad band of depressed silvery pubescence ; the mesonotal furrows are distinct. Scutellum roundly convex, distinctly raised over the meso-notum ; rugosely punctured ; there is a short, deep, almost smooth, furrow in the middle behind. Median segment closely and regularly reticulated ; the base is covered with depressed white pubescence ; the central area is widely expanded at the base ; its apex is not much wider than the other reticulations. The base of the meso-pleuræ is rugosely punctured ; the rest smooth, except for some striations in the middle. Meso-pleuræ coarsely, rugosely punctured. The upper part of the meta-pleuræ is irregularly reticulated ; the lower bears deep round punctures. Legs covered with long white hair ; the spurs white ; the

tarsal spines with a more rufous tinge. Abdomen ferruginous, the petiole and the apical segment black. The petiole covered with long white hairs; the other segments with ferruginous, except the last, which has blackish hair; the ventral keel has a slight curve, and at the apex projects into a short, triangular tooth; the hypopygium has the sides keeled to near the base; the keel is narrow, straight and curved inwardly at the apex. Wings smoky, with a slight, but distinct, violaceous tinge; the first cubital cellule at the top is not half the length of the second; the second transverse cubital nervure is roundly curved above the middle.

### SCOLIIDÆ.

#### MYZINE APIMACULA, *sp. nov.*

Nigra, flagello antennarum tarsisque rufo-testaceis; abdominis apice late rufo; alis hyalinis, nervis pallidis. ♀

Length.—9 mm.

*Habitat.*—Deesa.

Antennæ rufo-testaceous; the scape, except at the apex, black; the scape, with a few hairs, smooth and shining; the basal joints of the flagellum obliquely and gradually narrowed from the apex to the base. Clypeus rufous, strongly punctured, except at the base. Mandibles rufous, the apex black. Pro- and meso-thorax shining; the pro-finely and somewhat closely punctured; the meso-notum is impunctate at the base; the rest of it with minute, scattered punctures. Scutellum sparsely punctured on the sides and on the basal half; the post-scutellum is minutely punctured. Median segment closely and rather strongly aciculated; the apical slope bears also some minute punctures, and is thickly covered with white pubescence. Pro-pleuræ with scattered punctures; the apex closely, rugosely aciculated; the meso- punctured, except at the apex; the meta- closely, obliquely striated. Legs black; the greater part of the tibiæ and the tarsi rufous; the tibiæ and tarsi are thickly covered with white hair. Wings clear hyaline; the radial cellule of a faint fuscous colour; the stigma and nervures pale testaceous. Abdomen black; the back from the apex of the third segment and the ventral side from the apex of the second, red; it is sparsely covered with long white hair and minutely, but not closely, punctured; there is a closely striated band behind the apex of the pygidium.

A species easily known by the red apex of the abdomen. It is one of the smaller species.



POECILOTIPHIA, *gen. nov.*

♂ Forewings with two transverse cubital nervures which enclose a long cellule in the middle, this cellule receiving both the recurrent nervures. Radial cellule closed at the apex; the transverse basal nervure is interstitial; the discoidal cellules are large; in the hind wings the radial, cubital and discoidal nervures are continued to the edge of the wings and not abbreviated as in *Tiphia*. Mandibles bidentate, the lower tooth much larger than the upper. Pro-thorax large, transverse at the base. Legs thickly pilose; the middle with two spurs on the tibia; the claws simple, eyes large, sinuate on the inner side. Basal abdominal segment with a short, but distinct, peduncle at the base; the dilated part rounded on the sides, narrowed at the base and apex; the second segment distinctly narrowed at the base, becoming gradually wider towards the apex. The last abdominal segment is large, widely, roundly and deeply incised at the apex, the sides forming sharp teeth, between which the long curved anal spine projects.

The antennæ are stout; the apex of the clypeus is broadly rounded; the occiput is transverse and is margined; the scutellum is flat; the median segment bulges out roundly in the middle; the second and third abdominal segments are constricted at the base and apex; they are punctured and covered with stiff hair as in *Tiphia*; the legs are short, slender and thickly covered with long stiff hairs; the middle pair have two spurs; the median segment is without longitudinal keels; it is transverse at the apex, with the sides bulging out roundly.

The affinities of this genus are clearly with *Tiphia* and *Myzine*; the character of the alar neuration is sufficient to separate it from either; *Myzine* has three transverse cubital nervures, and the recurrent nervures are received in different cellules; its affinities are closer with *Tiphia*, but in it also the recurrent nervures are received in different cellules, which are also differently formed; *Tiphia* differs further in the middle tibiæ having only one spur; the occiput in our genus is transverse, not narrowed gradually, it differing also in having a distinct margin; the apical nervures in the hinder wings are more complete, extending to the apex and not abbreviated as they are in *Tiphia* and, to a less extent, in *Myzine*. The white markings on the abdomen remind one of *Thynnus*.

POECILOTIPHIA ALBOMACULATA, *sp. nov.* (Pl. fig. 6.)

Nigra, flagello antennarum, abdominisque apice rufis, abdomine albomaculato; lineis pronoti, apice clypei tarsisque albis; alis hyalinis, stigmatibus fuscis; nervis pallidis. ♂

Length.—8—9 mm.

*Habitat.*—Deesa.

Antennæ rufous, the scape black; the apical joints slightly dilated on the under-side; the scape punctured and covered with white hair. Head black; the apex of the clypeus white; the front rather strongly, the vertex more finely, punctured; the antennal tubercles smooth. Clypeus closely punctured, bounded above laterally by oblique, deep furrows. In front of the foreocellus is a deep pit; the hair is long and white. Mandibles rufous. Thorax black, punctured, covered with longish white hair; the hinder border of the pro-notum and a spot on either side at the base, white. Median segment closely, rugosely punctured; the meta-notum in the middle closely, transversely striated; the striæ are curved upwards. Pro- and meso-pleuræ shining, sparsely punctured; the lower part of the meta-pleuræ sparsely punctured, shining. Legs black; the knees, the fore-tibiæ in front and the tarsi white; the hair is long, stiff and white. Abdomen black; the apex of the fifth and its middle more broadly and the whole of the sixth and seventh segments rufous; a line on the middle of the basal five segments at the apex and a mark on either side of it and a small mark on the apex of the sixth, white. The petiole is smooth and shining, as is also the base of the second and the basal half of the third and fourth segments, the smooth and punctured portions being distinctly separated; the rest of the segments and the apical ones entirely punctured, strongly, but not very closely, and covered with longish, white hair; the spine is long, curved, stout and rufous. The ventral segments are fringed with white hair, and are strongly punctured. Wings clear hyaline; the stigma and costa fuscous, the nervures paler; the radius is oblique, and straight at the base; the apical abscissa is curved; the first transverse cubital nervure is elbowed shortly below the middle; the second is roundly curved; the recurrent nervures are received about the same distance from the base and apex of the cellule.

MEIRA QUADRIMACULATA, *sp. nov.* (Pl. fig. 5 ♀)

Nigra, ore, mandibulis, abdomine tarsisque rufis; abdomine quadrialbomaculato; alis hyalinis, nervis fuscis. ♀



Length.—8—9 mm.

*Habitat*.—Deesa.

Antennæ black ; the apex of the scape and the base of the flagellum rufous ; the under-side of the scape and the base of the flagellum bearing a few long white hairs. Head black, shining, bare ; the antennal tubercles and the apex of the clypeus rufous ; the apex of the clypeus transverse ; its sides straight ; it is sparsely punctured. On the base of the mandibles are some long, pale, fulvous hairs ; the apex blackish. Thorax black, smooth and shining ; the base of the pro-notum and the pleuræ are sparsely covered with long, soft, white hair ; the base of the pro-notum is sparsely punctured ; the apex is piceous ; on the sides of the scutellum are four punctures ; the base of the median segment is indistinctly furrowed. The base of the pro-pleuræ bears some minute punctures ; its apex and the meso-pleuræ are strongly, but not very closely, punctured ; the upper part of the meta-pleuræ closely, obliquely and minutely striated. Wings hyaline ; the stigma black ; the nervures testaceous. Legs black ; thickly covered with longish white hairs ; the tibiæ and tarsi dark rufo-testaceous ; the tibiæ darker behind. Abdomen ferruginous, smooth and shining ; the basal segment except at the apex, the second segment at the base laterally, and the base of the third laterally to a less extent, black ; in front of the black marks is an irregular, oblique, white mark.

*Meira* has not been hitherto recorded from the Oriental Zoological Region. It is allied to *Tiphia* and *Scolia*, and is easily known by the peculiar neuration of the fore-wings ; the second cubital cellule is largely appendiculated ; the first transverse cubital nervure is oblique, and bears the minute cubital cellule on its lower end near to the cubitus† ; the radial cellule is open in the ♀, closed in the ♂ ; the third cubital cellule is very large, being as long as the radial.

NURSEA, *gen. nov.*

Wings with two cubital cellules ; the first recurrent nervure received in the first, the second in the second cellule ; the former at a considerable distance from the transverse cubital nervure, the second close to it. Antennæ becoming gradually thicker towards the apex ; the last joint large, twice the length of the preceding. Head distinctly narrowed behind the eyes ; the occiput is sharply keeled. The antennæ

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† In the figure this little cellule is not shown.

are placed immediately over the clypeus, which is roundly convex and is rounded at the apex ; the apex itself being depressed. Mandibles longish, curved, unidentate. Ocelli large, placed in a triangle. Prothorax reaching to the tegulæ. Scutellum flat, a striated depression at its base ; its sides keeled. Post-scutellum striated. Median segment large, striated ; the sides toothed. Legs short, not elongated as in the *Pompilidæ* ; the middle tibiæ with two spurs ; they are not spined ; the tarsi spined at the apices of the joints ; the fore-tarsi are longer than the others and incised at the base. Abdomen broad at the base ; the last segment keeled down the sides and covered with a soft, depressed pubescence.

The second joint of the antennæ is larger than usual ; the middle coxæ are widely separated ; the sternum in front of them is raised ; the raised part has a broad, raised, rounded border on the outer-side ; the hinder coxæ are large and are closed together ; the second abdominal segment is large, and below is separated from the first by a deep depression ; the basal ventral segment has the sides keeled ; the middle is stoutly keeled, and from the middle keel others branch off to the apex.

The fact of this genus having the pro-notum largely developed behind and reaching to the tegulæ separates it from the *Sphegidæ*. In the latter respect it agrees with the *Pompilidæ*, from which it differs in some important points :—in the second cubital cellule, receiving only one of the recurrent nervures ; whereas in the *Pompilidæ*, when there are two cubital cellules, both the recurrent nervures are received in the second ; the antennæ are shorter, thicker towards the apex and not curled at the apex ; the scutellum is flatter and keeled ; the median segment is striated ; the legs are shorter, the hinder pair not being lengthened, and there is a distinct pygidium, bordered laterally and covered with pubescence, and the middle coxæ are not continuous, but widely separated—feature not found with any known *Pompilid*. The form of the median segment—in its being longitudinally striated and toothed laterally—reminds one of *Dolichurus*, but that is a typical sphegid.

NURSEA CARINATA, *sp. nov.* (Pl. fig. 4.)

Niger, nitidus, femoribus postecis rufis ; alis hyalinis, stigmatibus testaceo, nervis fuscis. ♀

Length.—6 mm.

*Habitat*.—Simla.

Antennæ black, distinctly thickened towards the apex ; the flagellum thickly covered with a microscopic white down ; the scape with the pubescence longer. Head above the antennæ smooth, shining, bearing a microscopic down and having a plumbeous hue ; the clypeus is shagreened, more shining in the middle than on the sides. Pro- and meso-thorax smooth and shining, and covered with a white down which is thicker and more distinct on the pleuræ. The depression at the base of the scutellum is finely, transversely striated at the base ; the apical half is longitudinally striated. Scutellum flat, bare, except for a few longish hairs ; the post-scutellum bears about ten, irregular, longitudinal keels. The basal third of the median segment is striated all over ; in the middle of the remainder are three longitudinal keels ; outside these on the middle part is a shorter keel ; on the sides are two keels with a shorter one in the middle at the base ; on the sides of the apical slope there is only one keel which ends in a short tooth ; the apical slope is more thickly covered with white pubescence than the rest. Pleuræ smooth and shining ; the sternum is widely furrowed in the middle. Legs black ; the hinder femora red. Wings clear hyaline ; the stigma is testaceous ; the nervures dark fuscous. Abdomen smooth shining and thickly covered with pale pubescence.

POMPILDÆ.

POMPIUS HERACLIDES, *sp. nov.* (Pl. fig. 3.)

Ferrugineo, abdomine late flavo-balteato ; pedibus rufis ; alis fere flavo-hyalinis, apice fumato. ♀

Length.—9 mm.

*Habitat.*—Deesa.

Antennæ rufo-fulvous, paler, more yellowish on the under-side ; bare. Head wider than the thorax ; transverse behind, bluntly rounded in front. On the head the inner orbits to near the lower ocelli and the sides of the clypeus more broadly and the outer orbits narrowly yellow ; the yellow line on the outer side extending downwards to the mandibles and above across the occiput. Clypeus slightly projecting ; the middle transverse, the sides broadly rounded. Mandibles rufous, black towards the apex. The eyes converge distinctly on the top ; the hinder ocelli are separated from each other by a distinctly greater distance than they are from the eyes. Thorax ferrugineous, covered with a white down ; the apex of the pro-notum is broadly rounded. The median segment has a gradually rounded slope from the base to

the apex. Wings yellowish-hyaline ; the yellow tint not very pronounced ; there is a fuscous cloud on the apex, commencing at the end of the radial cellule, but not extending backwards to the third transverse cubital nervure ; the third cellule is rather narrow, being at the top and bottom about half the length of the second ; the first recurrent nervure is received near the base of the apical third, the second at the base of the apical fourth, of the cellule ; the basal nervure is interstitial. In the hind wings the anal nervure is roundly and broadly curved at the apex and is received shortly beyond the cubital. Legs coloured like the body ; the tarsi paler, more yellowish in tint ; the tibiæ and tarsi have long, stout spines ; the front tarsi are fringed on the outer side with long, stiff spines. Abdomen coloured like the body, but with the third and fourth segments lemon-yellow, except at the apex.

This species appears to agree closely in colouration with *P. infestus*, Bingham ; that is a much larger species (15 mm.) ; the anterior tarsi are only feebly ciliated on the outer-side ; the median segment has a steep slope on the apex, &c.

POMPILUS DEESÆ, *sp. nov.*

*Long* : 7-8 m.m. ♀.

*HABITAT* : Deesa.

This species comes close to *P. vivax*, Cam. ; it is a shorter and stouter insect ; it is much more densely and closely pruinose ; the head does not project so much in front of the eyes ; the apex of the pronotum is transverse, not angled in the middle ; the radial cellule is narrower and the transverse median nervure is not interstitial, but is received distinctly beyond the transverse basal.

Antennæ short and stout. Head distinctly wider than the thorax, densely covered with silvery pubescence. Eyes almost parallel ; the hinder ocelli are separated from each other by about the same distance as they are from the eyes ; the head is rounded in front, transverse behind. Mandibles broadly rufous in the middle. Pronotum not quite so long as the head, it is transverse behind. The apex of the median segment has a steep, very slightly oblique, slope ; its sides rounded, but not broadly. Wings fuscous-hyaline at the base ; the apex from shortly behind the base of the radial cellule fuscous, much darker coloured than the base ; there is no trace of a yellow tint. Radial cellule short and wide ; the apical abscissa straight, oblique ; the second cubital cellule is very narrow and is gradually narrowed from the bottom to the top, where



the nervures unite ; at the bottom it is slightly less in width than the space bounded by the first recurrent and the second transverse cubital nervures ; the first recurrent nervure is received shortly beyond, the second behind, the middle of the cellules. The transverse median nervure is received beyond the transverse basal ; the anal nervure is received behind the cubital. Legs black ; the spines and calcaria black ; the spines on the front tarsi are longer than usual.

*POMPILUS CARYATIS, sp. nov.*

Niger, abdominis basi rufo ; alis fusco-violaceis ; cellula cubitali 2<sup>a</sup> fere longiore quam 1<sup>a</sup>. ♀ et ♂.

Long : 8 m.m.

HABITAT : Simla.

Antennæ rather stout, about half the length of the body, almost bare. Head large, if anything, wider than the thorax ; the sides of the front and the clypeus covered with silvery pubescence ; it is well developed behind, the part there being as long as the space between the hinder ocelli and the eyes. The hinder ocelli are separated from the eyes by a distinctly greater distance than they are from each other. The eyes are large and converge above ; they are there separated by the length of the second and third antennal joints united. The front and vertex are covered sparsely with long fuscous hair. The pronotum is shorter than the head ; in the centre of the median segment is a distinct fovea, deep and broader than long. Wings fuscous-violaceous. The apex from the second transverse cubital nervure smoky ; the third cubital cellule is, if anything, longer on the top than the second ; the transverse median nervure is received distinctly on the outer side of the transverse basal ; the second and third transverse cubital nervures are roundly curved, with a slightly oblique slope above ; the radial cellule is wide and is shorter than the second and third cubital cellules united ; in the hind wings the anal nervure is received behind the cubital—not interstitial. Legs stout ; the spines large and black as are also the calcaria. Abdomen short and stout, black ; the petiole, except at the base, the second segment entirely and more or less of the base of the third, red.

The ♂ is similarly coloured to the ♀ ; its antennæ are short and thick. If anything, its wings are lighter coloured, not quite so violaceous as in the ♀. The first recurrent nervure is received distinctly beyond, the second more shortly in front of the middle of the cellules.

This species comes nearest to *P. detectus*, Cam. ; that is a larger species ; its head is not so largely developed behind the eyes, and is not so distinctly obliquely narrowed there ; the second cubital cellule is differently formed, it being much more narrowed at the top, the nervures meeting there ; the transverse basal nervure is interstitial, this being also the case with the anal nervure in the hind wings.

Bingham (Fauna of India, Hymen., p. 159) sinks *detectus*, Cam., as a synonym of *reflexus*, Sm., and *familiaris*, Sm. I cannot agree with this without an examination of Smith's types, the description not being precise enough for exact determination. *Reflexus* is from Japan and *familiaris* from Sumatra.

The species is not unlike *P. eanes* here described, but it is a larger and more robust species ; the third transverse cubital nervure is more distinctly angled above ; the transverse median nervure is received nearer the transverse basal, and the hinder ocelli are separated from each other by the same distance they are from the eyes ; in *eanes* they are separated from them by a distinctly greater distance.

POMPILUS EANES, *sp. nov.*

*Long* : 7-8 m.m.

*HABITAT* : Simla.

This species has the colouration of *P. caryatis* and *reflexus*. It is a more slender species than *caryatis* ; its wings want the distinct violaceous tint of that species ; the head is not so strongly built and is not so well developed behind the eyes ; the second cubital cellule is wider at the top, being there more than half the width of its lower part, whereas in *caryatis* it is not half its length ; the second cubital nervure is not broadly rounded, but is more oblique and straight ; the second recurrent nervure is received nearer the middle of the cellule, and the head and thorax are more densely pilose.

Antennæ stout, as long as the abdomen ; the scape sparsely pilose. Head as wide as the thorax ; the space behind the eyes as long as the second antennal joint ; the hinder ocelli are separated from each other by about the same space as they are from the eyes. The pronotum is not quite so long as the head. There is an indistinct, impressed line on the centre of the median segment. Wings hyaline, the apex smoky ; the radial cellule is as long as the lowerside of the second and third cubital cellules united ; the second cubital cellule at the top is twice the length of the third ; the first transverse cubital nervure is



not gradually rounded, but has an oblique slope on the upper half, as has also the third; the first recurrent nervure is received shortly behind; the second almost in the middle; the transverse median nervure is received distinctly in front of the transverse basal; the accessory nervure in the hind wings is almost interstitial. On the abdomen the first, the second and the basal fourth of the third are rufous.

*POMPILUS SOLLICITNAS, sp. nov.*

Niger, facie, clypeo, orbitis oculorum, prothorace, mesonoto cum scutello, pleurisque rufis; pedibus rufis, tarsis fuscis; abdominis apice flavo; alis hyalinis, apice fumatis.

Long: 6-7 m.m. ♂.

HABITAT: Simla.

Antennæ short, thick, distinctly tapering towards the apex; rufous darker above and underneath towards the apex; the scape paler, more yellowish in tint. Head dark-rufous; the greater part of the vertex black; the front and vertex thickly covered with white pubescence. Eyes large, slightly converging above. Ocelli more prominent than usual; the hinder pair are separated from each other by a distinctly greater distance than they are from the eyes. Thorax ferruginous; the median segment, the parts bordering the sides of the scutellum and the mesonotum, black; it is smooth, shining and thickly covered with a white pubescence. Scutellum prominent, narrowed towards the apex, which is rounded. The metanotum is thickly covered with white pubescence. Wings clear hyaline, the apex with a distinct cloud, which commences shortly beyond the third transverse cubital nervure, but does not reach to the extreme apex, which is hyaline; the third cellule is distinctly shorter than the second by about one-fourth; the third transverse cubital nervure has the upper half obliquely curved, which makes the top of the cellule narrower than the bottom; the first recurrent nervure is received at the base of the apical third; the second in the middle; the transverse basal nervure is interstitial. Legs coloured like the thorax; the hinder tibiæ and tarsi infuscated. The tibiæ and tarsi are distinctly, but sparsely, spined. Abdomen black; the basal ventral segment rufous; the apical segment is whitish-yellow.

Comes nearest to *P. lascivus*, Cam. That species has only the upper side of the thorax red; the basal half of the wings is hyaline; the metanotum is not black, and it is transversely striated; it is also a larger species.

POMPILUS ALCACUS, *sp. nov.*

Niger, abdominis basi late, tibiis femoribusque posterioribus rufis ;  
 alis hyalinis, apice fumatis. ♀

*Long* : 6-7 m. m.

*HABITAT* : Deesa.

Front and vertex shining, aciculated, almost bare ; the face and clypeus densely covered with silvery pubescence ; the apex of clypeus broadly transverse. Mandibles broadly rufous at the base. Antennæ short and thick. Thorax densely pruinose which gives it a white appearance. The pronotum is fully longer than the head. The median segment is more densely pruinose than the rest of the thorax ; it has no longitudinal furrow. Abdomen smooth and shining ; the basal three segments are entirely ferruginous. Wings hyaline, fuscous from the apex of the radial cellule. Radial cellule short and wide ; there are three curves in the radius ; the apical one being the larger and is itself slightly obliquely curved towards the apex ; the second cubital cellule is large, the third small, narrow ; at the top hardly one-fourth of the upper side of the second ; it is narrowed at the top ; the first recurrent nervure is received shortly beyond the apex of the basal third of the cellule ; the second is almost united with the second transverse cubital. The transverse median nervure is received beyond the transverse basal, clearly separated from it. In the hind wings the apical nervures are faint, almost obliterated ; the anal cellule is appendiculated.

Comes nearest, through its general colouration and alar neuration, to *P. zeus*, Cam. That species is larger (8-9 m. m.) ; the apical abscissa of the radius is rounded and is broadly curved downwards, the apex of the cellule thus not being acutely pointed and the median nervure is interstitial.

POMPILUS (PLANICEPS) CAROLI, *sp. nov.*

Niger, dense pruinoso ; alis hyalinis, apice fumatis. ♀.

*Long* : 7-8 m. m.

*HABITAT* : Deesa.

The entire body densely covered with a silvery pile, which gives it a greyish appearance. Antennæ short ; the scape covered with silvery pubescence. Head transverse behind ; the eyes reach to the hinder edge ; in front it is slightly rounded ; the ocelli are in a curve ( ∙ ∙ ), not forming a triangle ; the hinder are separated from each other by a slightly greater distance than they are from the eyes. Clypeus broadly

convex ; its apex in the middle transverse and with a distinct depressed margin. The pronotum is shortly, but distinctly, longer than the head ; the median segment has a gradually rounded slope. The mandibles are broadly rufous at the base. Legs long ; the hinder tarsi and spurs have a brownish hue ; the spines are stout. Wings clear hyaline ; the apex from near the end of the radial cellule is smoky ; the middle (second) cubital cellule is on the lower side longer than the others ; the first recurrent nervure is received opposite the end of the first abscissa of the radius ; the second at a less distance from the end. The anal nervure in the hind wings is almost, if not quite, interstitial, as is also the transverse basal.

POMPILUS (PLANICEPS) HALYS, *sp. nov.*

*Long* : fere 6 m. m. ♂.

*HABITAT* : Deesa.

This species agrees closely with *P. caroli* here described, but may be readily separated from it by the difference in the alar neurulation ; its radial cellule is distinctly shorter and does not reach half way between the end of the stigma and the apex of the wing, whereas in *caroli* it is distinctly longer, it extending beyond the middle ; the middle cubital cellule is also much shorter, it being not half the length of the apical, whereas in *caroli* it is longer than it.

Antennæ short and thick, the joints clearly separated, the apical slightly dilated on the underside. Eyes slightly converging below, the hinder ocelli are separated from each other by a distinctly greater distance than they are from the eyes. Clypeus broadly convex ; its apex transverse, the sides oblique. Occiput transverse. Pronotum slightly larger than the head. Legs black, the spines long and black. Wings hyaline, smoky from near the second transverse cubital nervure. Radial cellule short, scarcely longer than the middle cellule, its apex acutely pointed ; the middle cellule is about one-half the length of the apical ; the recurrent nervures are received about the same distance from the base and apex ; the transverse median nervure is received on the outer side of the transverse basal and clearly separately from it ; the anal nervure in the hind wings is received behind the cubital. The entire body is densely pruinose.

POMPILUS (PLANICEPS) SIMLAENSIS, *sp. nov.*

*Long* : 6 m. m. ♂.

*HABITAT* : Simla.

This species is very closely related to *P. caroli* and *P. halys*, having like them the wings clouded towards the apex; but the apical cloud is not so deeply tinted; it is broader, and it extends near to the first transverse cubital nervure; the middle cubital cellule is much shorter than it is in *caroli*; from *halys* it may be known by the longer and narrower radial cellule.

Head transverse behind, rounded in front; smooth and shining; it hardly projects beyond the middle behind; the eyes are parallel and hardly converge below; the hinder ocelli are separated from each other by a distinctly greater distance than they are from the eyes. The apex of the clypeus is transverse in the middle at the apex; it is rather flat, not convex to any extent. Mandibles broadly rufous in the middle. The radial and cubital cellules are smoky, but not deeply; the cloud also extending below the cubitus; in the cubital cellules the cloud is divided in two by a narrow hyaline band placed beyond the second transverse cubital nervure. Radial cellule elongate, lanceolate at the apex; it is distinctly longer than the middle cubital cellule, which is somewhat shorter than the apical abscissa of the cubitus; the basal nervure is roundly curved; the transverse medium is about interstitial. In the hind wings the anal nervure is received behind the cubital. The antennæ are stout; their middle and apical joints are distinctly and roundly dilated on the lower side.

POMPIIUS (PLANICEPS) INDOSTANUS, *sp. nov.*

Niger, pruinoso; alis clare hyalinis. ♀.

Long: 7 m. m.

HABITAT: Deesa.

Antennæ as long as the abdomen; covered with a pale pile. Head rounded in front, behind not quite transverse, being slightly rounded inwardly. The eyes slightly converge above and reach close to the base of the mandibles; the head behind them is fairly well developed, being there about two-thirds of the width of the eyes; the hinder ocelli are separated from each other by a distinctly greater distance than they are from the eyes. The prothorax is not much longer than the head. The spines on the legs are long and black. Wings clear hyaline; the radial cellule is elongate, narrow, sharply lanceolate at the apex; the middle cubital cellule is distinctly longer than it, the transverse basal nervure is interstitial; in the hind wings the anal nervure is received distinctly behind the cubital.

Easily known by the clear hyaline wings.



*APORUS EXCRUCIANS, sp. nov.*

Niger, abdominis basi late rufo; alis fere hyalinis, apice fusco. ♂.

Long: 6 m.m.

HABITAT: Simla.

Head alutaceous, opaque; the face covered with silvery pubescence; the ocelli hardly form a triangle; the hinder pair are separated from the eyes by a slightly greater distance than they are from each other. The eyes converge very slightly towards the bottom; there is a slight curve on the inner side above. Mandibles rufous, black at the base. Thorax opaque, covered with a pale pubescence. Legs long, black, with a pale pubescence; the spines and calcaria are black. Wings fuscons-hyaline, with a slight, but distinct, cloud on the apex, from the end of the radial cellule. Radial cellule small; the apical two-thirds obliquely narrowed; the second cubital cellule is about the length of the radial; it is about as wide as long, rounded at the top; the cubital nervures there are separated by slightly less than the space bounded by the first transverse cubital and the first recurrent nervures, which is received near the apex of the apical fourth of the cellule; the second at a less distance from the apex. The anal cellule in the hind wings is short, its apex not reaching to the middle, the second has a rounded curve; the recurrent nervures are received near the middle of the cellules; the transverse basal nervure is received distinctly in front of the transverse basal. In the hind wings the anal nervure is interstitial or nearly so. On the abdomen, the basal, the second and the base of the third segment are red.

SPHEGIDÆ.

*NOTOGONIA PULCHERRIMA, sp. nov. (Pl. fig. 7. 7a.)*

Nigra, abdominis basi late, apice pedibusque rufis; alis flavo-hyalinis, apice fumatis. ♀.

Long: 17 m.m.

HABITAT: Deesa.

Antennæ covered with silvery pubescence; black. The scape red. Head black; the apex of the clypeus dull-red; the front and clypeus covered with depressed silvery pubescence; the lower part of the vertex is sparsely pilose. Mandibles broadly rufous in the middle; the base is covered with silvery pubescence; the apical joints of the palpi are dark-rufous. Thorax covered with a silvery pile, which has a more golden hue on the mesonotum. The median segment is transverse; the

metapleuræ obliquely closely striated. Wings yellowish-hyaline; fuscous from the base of the radial cellule. Legs red; the anterior coxæ and trochanters, the greater part of the middle coxæ and the base of the posterior coxæ, black; the spurs and spines on the front legs are dark-rufous; on the four posterior legs they are black. The basal two segments of the abdomen and the last segment are red; the segments are bordered with silvery pubescence, the pile on the pygidium is silvery.

The ♂ is similarly coloured, except that the scape is black. A distinct and handsome species.

GASTROSERICUS RUFTARSIS, *sp. nov.*

Niger, dense albo piloso, basi abdominis, geniculis tarsisque rufis; alis hyalinis, costæ stigmatæque testaceis, nervis fuscis. ♀.

*Long.*: 9 m.m.

HABITAT: Deesa.

Antennæ black, thickly covered with silvery pubescence; the apex of the scape pale-yellow. Head black; the front thickly covered with longish grey hair; the cheeks and clypeus with longish, depressed bright-silvery pubescence; the vertex is sparsely haired; the ocellar region is closely and distinctly punctured; behind with an oblique slope, and smooth and shining; the vertex minutely, but not very closely, punctured; it is obliquely depressed towards the centre, where there is a narrow longitudinal furrow. Mandibles pallid yellow at the base, where they are covered with depressed silvery pubescence; the apex black, rufous behind. Thorax thickly covered with white pubescence, it is longest and thickest on the apical slope of the median segment; the mesonotum and scutellum closely and distinctly punctured; the median segment rugose. Wings clear hyaline, with a steelly iridescence; the costa and stigma are rufo-testaceous, the nervures darker; the radial cellule is short, its apical abscissa is straight and has a slightly oblique slope; the lower abscissa projects beyond it as a short stump; the cubital cellule is much narrowed on the top; the recurrent nervures are united and are received near the basal fourth of the cellule. Legs thickly covered with silvery pubescence; all the tarsi and the base and apex of the tibiæ are rufous; the tibial and tarsal spines are pale. Abdomen black; the basal segment and the second, except at the apex, rufous; the apex of the segments marked with bright silvery pubescence; the pygidium is covered with depressed silvery pubescence.



A species closely related to *G. wroughtoni*, but distinctly smaller and more slenderly built. The differences between them may be expressed thus—

Length—11 m.m.

The tarsi for the greater part black; the upper part of the second transverse cubital nervure is straight and makes an elbow below with the larger lower portion; the lower part of the second recurrent nervure broadly rounded.—

*Wroughtoni*.

Length—9 m.m.

The tarsi rufous; the upper part of the second transverse cubital not sharply elbowed on its lower end; the lower part *rufitarsis* of the second recurrent nervure.

*OXYBELUS AURIFRONS*, *sp. nov.*

Niger, flavo-maculato, fronte aureopiloso, pedibus posticis nigris, basi tibiæ tarsisque flavis. ♀.

*Long* : 5·6 m.m.

*HABITAT* : Deesa.

Scape of antennæ yellow, lined with black above; the flagellum rufous, the base blackish above. Head black: the front thickly covered with golden pubescence; the vertex closely punctured and covered with silvery pubescence, which does not hide the sculpture. Clypeus broadly projecting in the middle; the sides of the keel with an oblique slope on the sides; the apex has also an oblique, rounded slope above and does not project much. Mandibles more or less rufous, the base broadly yellow. Thorax black; a line on the pronotum, the scutellum, except down the centre and at the apex, the post scutellum with its spines, the tubercles and the tegulae, yellow. Mesonotum closely and strongly punctured; the scutellum is more strongly, but not quite so closely, punctured, and is stoutly keeled down the middle; the post-scutellum is broadly and roundly raised in the middle; the lateral laminae are roundly curved outwardly; the apex sharp; it becomes gradually wider towards the base on the inner side; the spine is long, curved, of nearly equal width, hollowed above; the apex in the middle triangularly incised. The median segment is irregularly obliquely striated; the striae are placed at irregular distances; the middle of the segment is hollowed and is free from striae; its apex is sharply obliquely pointed. Legs black; the underside and apex of the fore femora, their

tibiæ and tarsi, the middle knees, the tibiæ, except broadly above, the base of the hinder tibiæ and the tarsi, yellow. Wings clear hyaline; the nervures and stigma black. Abdomen black, with two large broad marks on each segment.

PSEN CARINIFRONS, *sp. nov.*

Niger, mandibulis, scapo antennarum, linea pronoti, scutello, post-scutello, pedibus anterioribus tibiisque posticis flavis; abdominis medio rufo late maculato; alis hyalinis; nervis stigmatæque nigris. ♂.

*Long*: fore 7 m.m.

*HABITAT*: Deesa.

Antennæ black, stout; the scape and second joint straw-yellow; the flagellum brownish beneath towards the apex and base. Head black; the vertex smooth, shining; the front minutely and closely punctured; the lower part of the face and the clypeus thickly covered with depressed silvery pubescence; between the antennæ is a stout, projecting keel, which becomes triangularly widened below the antennæ. Mandibles and palpi straw-yellow; the mandibular teeth black; the palpi yellow. Thorax shining; the edge of the pronotum, the tubercles, scutellum and post-scutellum straw-yellow. Median segment reticulated, broadly furrowed down the middle, the furrow not margined; the base of the segment is smooth; the narrow depression at the base is striated; pro- and meso-pleuræ smooth and shining; the furrows crenulated; the metapleuræ reticulated; the reticulations are closer and more regular than they are on the metanotum. The four front legs are straw-yellow, as are also the hinder tibiæ; the hinder coxæ, except at the apex, the femora, the apex of the tibiæ and of the tarsi, black. Wings clear hyaline; the first and second transverse cubital nervures are parallel and oblique; the first recurrent nervure is interstitial; the second is received shortly beyond the second transverse cubital, almost touching it. Abdomen black; the second segment is rufous to shortly beyond its middle; the petiole is longer than usual, being as long as all the rest of the abdomen united in the ♂; it is largely nodose at the apex.

This species is easily known by the presence of a pointed plate between the antennæ. The only species known, similarly armed, is *P. annulipes*, Cam., from Central America, for which Kohl. (Ann. d. k. k. Hof. Mus. Wien, 1896, p. 292) formed a distinct section of the genus. Apart from this structural peculiarity it differs from the other

species in having the median segment more regularly reticulated; the "enclosed area" at its base is not of a triangular form and extends to the sides, while in the other species it is confined to the centre and is more regularly bordered by furrows; the segment itself is larger compared to the rest of the thorax; the petiole is longer than usual and is more distinctly dilated at the apex. In the hind wings the apical nervures are obliterated; the transverse anal nervure is received behind the cubital, the discoidal nervure being obliterated entirely. In the forewings the transverse basal nervure is received shortly behind the transverse basal.

*PSEN RETICULATUS, sp. nov.*

Niger, nitidus, capite thoraceque dense albo pilosis; alis hyalinis, nervis stigmatique nigris. ♀ et ♂.

*Long* : 10-11 m.m.

*HABITAT* : Deesa.

Scape of antennæ bearing white hairs; the flagellum densely covered with white pubescence. Front and vertex smooth and shining; covered with longish white hair; the face and clypeus densely covered with silvery pubescence, which is more dense on the face than on the clypeus. The clypeus is broadly roundly convex; its apex broadly projects in the middle; the projecting part has a broad, shallow incision; its sides are oblique. Thorax smooth and shining; the basal area of the median segment is stontly longitudinally keeled, except in the middle, where there is a wide shallow furrow, which is bordered by keels, becomes wider gradually towards the apex and bears a few transverse keels at the base; in the middle are a few stouter keels, from which the furrow is continued to the apex of the segment; on the apical slope is, on either side of this furrow, a large shallow somewhat semicircular furrow, bordered on the inner side by a stout keel; from the centre of this area two stout keels run to the sides, these being divided by an irregular curved one in the centre. The basal furrow on the mesopleuræ is crenulated, the longitudinal one is smooth and narrower. The apex of the metapleuræ is bordered by a keel, beyond which is another more irregular one, the two enclosing between them the stigma, below which are three or four stout keels. Wings clear hyaline; the second recurrent nervure is interstitial. Legs covered with long soft white hair; the spurs are pale. Abdomen smooth and shining; the long-curved petiole is covered with long white, soft hairs.

Comes nearest to *P. orientalis*, Cam.; is easily separated from it by the different form of the median segment; in it the enclosed space is finely, not stoutly, longitudinally striated, and the apical slope of the segment is not broadly and deeply furrowed. The black on the thorax has a plumbeous hue; the pygidial area is clearly defined; it is smooth and shining at the base; the apex is opaque and has some irregular punctures on the sides. The striæ on the median segment give it a reticulated appearance, especially on the sides.

ALYSON TESTACEITARSIS, *sp. nov.*

Niger, nitidis, scapo antennarum, mandibulis orbitisque oculorum infra albis; alis hyalinis, fusco bifasciatis. ♀.

Long: 6 m.m.

HABITAT: Simla.

Antennæ black; the scape pale-yellow beneath. Head black; a line on the inner orbits reaching from shortly above the middle to shortly below the base of the antennæ, a mark on either side of the middle of the clypeus and the mandibles, except the teeth, pale-yellow. Thorax entirely black, covered with short pale pubescence; the median segment irregularly, transversely and obliquely striated; the central area is elongate; it bears two keels in the centre at the base, which reach to beyond the middle and diverge outwardly at the apex; the space between and on either side of them is smooth; from its apex a stout keel runs down to the end of the segment. The base of the pronotum is depressed and clearly separated from the larger raised apical part. Pleuræ smooth and shining; the upper part of the mesopleuræ is raised; on the sides, at the top of the apical slope of the median segment, is a short, stout tooth. Wings hyaline, the nervures and stigma blackish; the latter pale at the base; there is a fuscous cloud along the outer side of the transverse basal nervure and a broader oblique one occupying the radial cellule, except its apex, and extending through the cubital cellules to the posterior border. Legs black; the anterior coxæ in front, the greater part of the front trochanters, the base of the fore femora and the whole of the front tarsi, pale-testaceous; the four hinder tarsi are of a darker testaceous colour. Abdomen smooth and shining; the two spots white; the pygidium is covered with depressed silvery pubescence and with some longish hair; its edges are testaceous. The head and thorax are covered with silvery pubescence; the apex of the abdomen and the ventral segment sparsely with long silvery hair.



Allied to *A. annulipes*, Cam., which, *inter alia*, differs in having the apical slope of the median segment areolated.

ALYSON ERYTHROTHORAX, *sp. nov.*

Niger, thorace rufo ; scapo antennarum subtus, clypeo, mandibulis, lineaque orbitis oculorum flavis ; pedibus nigris, tibiis anterioribus anticiss basique tibiæ posticarum albis ; alis hyalinis, apice fumatis. ♀.

*Long* : 4 m.m.

*HABITAT* : Simla.

Antennæ black ; the scape yellow below. Head thickly covered with silvery pubescence ; the front closely and distinctly punctured ; the lower half of the inner orbits, the clypeus and the mandibles, yellow ; the apices of the mandibles piceous. Thorax rufous ; the lower part of the mesopleuræ and the breast black : it is thickly covered with white pubescence ; the propleuræ striated in the middle ; the mesonotum closely and distinctly punctured ; the scutellum more obscurely punctured. Median segment rather strongly and irregularly transversely striated ; the central area is rounded at the apex ; the apical slope is oblique ; its central keel is stout ; shortly below its middle is a transverse one, and below this is another shorter transverse keel. Legs black ; the apices of the four anterior coxæ the apex of their trochanters, the four anterior tibiæ in front, and the base of the hinder tibiæ, white ; the tarsi testaceous. Wings hyaline ; the apex from the middle of the stigma smoky ; the transverse cubital nervures are interstitial. Abdomen smooth and shining.

Allied to *Alyson ruficollis*, which may be known from it by the two keels on the median segment being not united at the apex ; the propleuræ are not striated ; the hair on the front and vertex is black and the wings have not a distinct cloud on the apex.

VESPIDÆ.

ZETHUS INTERSTITIALIS, *sp. nov.*

Niger, sparse flavo maculato, dense albo piloso ; alis hyalinis, antice fumato ; tegulis rufis ; cellula cubitali 2<sup>a</sup> appendiculata. ♀.

*Long* : 10 m.m.

*HABITAT* : Matheran, in March.

Antennæ black ; the scape marked with yellow towards the apex ; the flagellum rufous beneath at the apex. Clypeus sparsely punctured and covered with a microscopic down ; on its top is an irregular